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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,257	07/07/2003	DAVID C. LONG	FIS920030100US1	1256

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EXAMINER

EDWARDS, LAURA ESTELLE

ART UNIT PAPER NUMBER

1734

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,257

Applicant(s)

LONG ET AL.

Examiner

Laura Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 070703
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Drawings

Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-12, and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Zimmer (US 3,987,724).

Zimmer teaches a screen printing nozzle comprising a nozzle body (6); a first layer (10, see col. 2, lines 21-26 and lines 35-39) on said nozzle body; a second layer (12, see col. 2, lines 40-43) on said first layer, wherein said second layer includes a contact surface adapted to contact a stencil mask (16), and wherein said first layer has a lower durometer than said second layer, and an opening (13) through said nozzle body, said first layer, and said second layer, wherein

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said opening is adapted to allow material to flow through said screen printing nozzle to said stencil mask.

With respect to claim 2, the first layer can be made of rubber while the second layer is made from TEFLON.

With respect to claim 3, TEFLON is deemed an abrasion resistant material because it is a low-friction synthetic material as evidenced by col. 2, lines 39-42.

With respect to claim 3, the second layer can include foam rubber (11) which is deemed more flexible than TEFLON.

With respect to claim 5, in Fig. 2, the nozzle body includes members 10' and 11' within which the layers are disposed.

With respect to claim 8, the first layer made of rubber is deemed softer than the second layer made of TEFLON.

With respect to claim 15, the second layer (12) as shown in Fig. 1 is thinner than the first layer (10).

Claims 1-4, 7-11, and 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitter (US 4,612,874).

Mitter teaches a screen printing nozzle comprising a nozzle body (2); a first layer (6,7, see col. and col. 10, lines 40-44) on said nozzle body; a second layer (8, 9, see col. 9, lines 12-16) on said first layer, wherein said second layer includes a contact surface adapted to contact a stencil mask (7), and wherein said first layer has a lower durometer than said second layer, and an opening (10) through said nozzle body, said first layer, and said second layer, wherein said

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opening is adapted to allow material to flow through said screen printing nozzle to said stencil mask.

With respect to claim 2, the first layer can be made of foam rubber while the second layer is made from TEFLON.

With respect to claim 3, TEFLON is deemed an abrasion resistant material because it is a low-friction synthetic material.

With respect to claim 3, the second layer is made from foam rubber which is deemed more flexible than TEFLON.

With respect to claim 8, the first layer made of rubber is deemed softer than the second layer made of TEFLON.

With respect to claim 15, the second layer (8, 9) as shown in Fig. 1 is thinner than the first layer (6, 7).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 6, 13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmer (US 3,987,724) in view of Mitter (US 4,612,874).

The teachings of Zimmer have been mentioned above but Zimmer is silent concerning the nozzle body layers being bonded to one another. However, it was known in the art, at the time the invention was made, to bond together first and second layers on a screen printing applicator nozzle wherein the first layer is made of rubber and the second layer made of TEFLON as evidenced by Mitter (see col. 9, lines 5-16 and col. 10, lines 40-44). In view of the teachings of Mitter, it would have been obvious to one of ordinary skill in the art to manufacture the nozzle body via bonding of the layers to one another to provide for a single unitary nozzle applicator body.

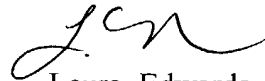
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Laura Edwards
Primary Examiner
Art Unit 1734

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December 3, 2004